

DON'T SAY IT --- Write It!

DATE: January 3, 1996

TO: Greta P. Davis, Ecology B5-18FROM: Ellen M. Mattlin, RL A5-15

Telephone: 376-2385

cc: P. C. Miller, WHC N2-57
A. L. Prignano, WHC H6-23
F. A. Ruck, III, WHC H6-23
Administrative Record H6-08

SUBJECT: 4843 AMSF Closure: Field Logbook, Analytical Results, and
Inspection Checklist

Attached please find the following:

- 1) Field Logbook WHC-N-205, number 52, pages 72 and 73.

This log records the field activities performed in obtaining samples of the sweepings collected from the floor of the 4843 Alkali Metal Storage Facility (4843 AMSF). This work was performed as required by the 4843 AMSF Closure Plan, Revision 1, chapter 7.

- 2) Westinghouse Hanford Company Internal Memo SAS95-239, dated December 11, 1995.

This Internal Memo contains the results from the chemical analyses of the sample obtained from the sweepings of the 4843 AMSF floor. A draft of this memo, dated August 14, 1995, was transmitted during the September 1995 Unit Managers' Meeting (UMM). Changes were made in the distribution, signature, and Internal Memo number only; no changes were made in the subject or text from the memo attached to the September 1995 UMM minutes.

- 3) Checklist for inspection of the 4843 AMSF for carbonates.

This checklist, signed by WHC and RL personnel, verifies that the 4843 AMSF is free of lithium and sodium carbonates as determined by visual inspection as discussed in Chapter 7 of the 4843 AMSF Closure Plan, Revision 1. The inspection occurred and the checklist was signed on September 25, 1995.



PROJECT 4843 ALKALI METAL STORAGE FACILITY CLOSURE

Continued From Page 1004

Project Title: 4843 Alkali Metal Storage Facility Closure

Sample Date: 07-20-95

Charge Code: 136022

Customer's Name: Phil Miller WAC FFTE N2-57 376-0441

SML Personnel: Ken J. Young WAC SML S3-27 373-7423

Reference Document: 4843 Alkali Metal Storage Facility Closure Plan
40-49 Rev

Purpose: The purpose of this sampling event is to obtain and analyze samples from the sweeping of the floor from the 4843 Alkali Metal Storage Facility to confirm the material doesn't contain dangerous waste characteristics per WAC 173-303.

Field Personnel: Z.C. Kraus WAC Scientist

P.C. Miller WAC Section Leader

G.P. Davis Washington Dept of Ecology

A.O. Huckaby Washington Dept of Ecology

RWIP: N/A

PPE Used: 1 pair coveralls, 1 pair surgeons gloves and safety boots

Weather Conditions: Not Applicable, Sampling was performed and bottle sealed inside of 4843

Field Screening: none

Possible Sample Contaminants: none

Sample Matrix: soil

Sample Method: Sample FT5086-01 was collected from a plastic bag which contained the sweepings of the floor from the 4843 building. The plastic bag was opened with an EIL S.S. cleaned pair of scissors. The exposed soil was then mixed with air EIL S.S. cleaned spoon. A cleaner cut floor clean bottle was then filled using the same cleaned spoon.

Sample #	Date Collected	Time	Container	Lot #	Serial #
FT5086-01	7/20/95	10:10 0910	(1) 250 ml Poly	L/23165060	AG38968C

Continued on Page

Read and Understood By

Ken J. Young K.J. Young
Signed

9/20/95
Date

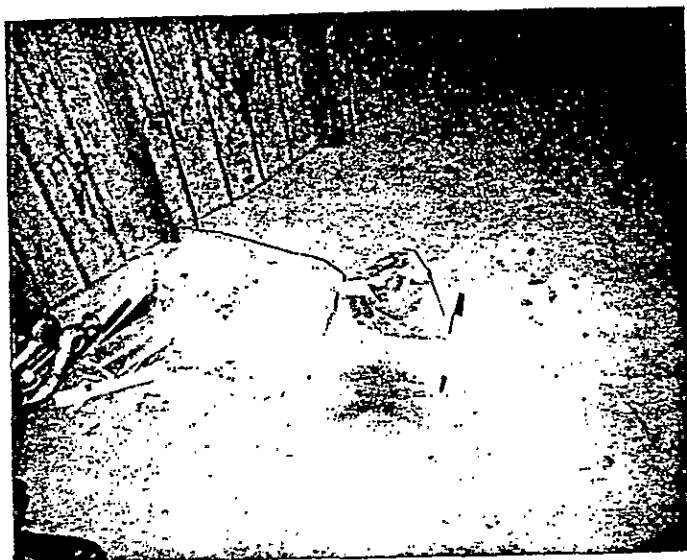
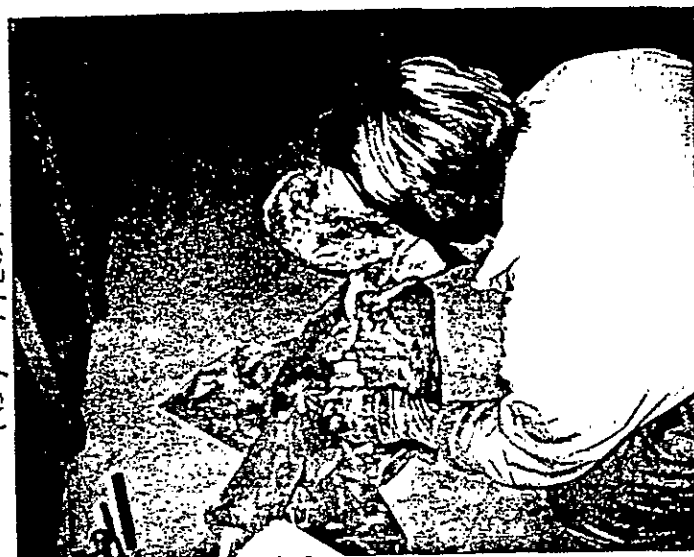
[Signature]
Signed

11/28
C

PROJECT 4843 Alkali Metal Storage Facility Closure

KJY 7/20/95

KJY 7/20/95

7/20/95 0910 4843 building KJY
Sweepings from floor.7/20/95 0910 4843 Building KJY
Sweepings from floor.

KJY 7/20/95

KJY 7/20/95

Shipping Information: Sample was shipped to FAST in a Government vehicle in cooler # SML-595 on COC # 000995-01 on 7/20/95

Two Photo's on this Page

Four Attachments on this Page.

File Narrative

soil sample was received 07/20/95 from 4843 Facility for analysis of soluble cations. Sample was analyzed on 8/10/95 on a DX-100 Chromatograph using EPA Method 300.7. Sample was stored under controlled conditions and rinsed with reagent-grade water prior to analysis.

File Results

Sample ID	Lithium mg/g	Sodium mg/g	Ammonium mg/g	Potassium mg/g	Magnesium mg/g	Calcium mg/g
5086-01	<0.010	0.095	0.105	0.208	0.140	0.441

Analyte	Beginning Standard	Ending Standard	Standard Additive to FT5069-08
Lithium	117%	117%	102.3%
Sodium	107%	107%	102.9%
Ammonium	116%	*132%	103.0%
Potassium	104%	104%	113.3%
Magnesium	*144%	*145%	114.7
Calcium	*123%	*133%	113.3
Sodium	111%	112%	101%

* Standard recovery exceeded method acceptance range of 80-

Quality Control

Quality control standards were analyzed before and after sample analysis to demonstrate instrument accuracy and method control. A blank was analyzed to show that there was no contamination added to the sample during the extraction process or to the column of the instrument. Standard recoveries are stated below:

Continued on Page None

Read and Understood By

Kim Young K.S. Young
Signed

7/20/95

Date

Dr. Edwards
Signed

11/28/95
Date

Westinghouse
Hanford Company

Internal
Memo

From: Special Analytical Studies
Phone: 373-4771 S3-90
Date: December 11, 1995
Subject: 4843 BUILDING SOLUBLE CATION ANALYSIS - FT5086-01

SAS95-239

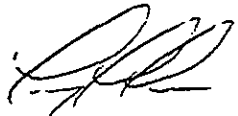
To: A. L. Prignano H6-23

cc: D. J. Smith
FAST File

S3-90 

Attached is the analytical report in support of this project.

If you have any questions regarding analysis, please contact either Mr. Don Smith at 373-2482 or Ms. Joy Smith at 373-9171.



L. L. Lockrem
Manager

sir

Attachment

ANALYTICAL REPORT

Sample Narrative

One soil sample was received July 20, 1995 from 4843 Facility for analysis of soluble cations. Sample was analyzed on August 10, 1995 on a DX-100 Chromatograph using EPA method 300.7. Sample was stored under controlled conditions and extracted with reagent-grade water prior to analysis.

Sample Results

Sample ID	Lithium mg/g	Sodium mg/g	Ammonium mg/g	Potassium mg/g	Magnesium mg/g	Calcium mg/g
FT5086-01	<0.010	0.095	0.105	0.208	0.140	0.441

Quality Control

Quality control standards were analyzed before and after sample analysis to demonstrate instrument accuracy and method control. A blank was analyzed to show that there was no contamination added to the sample during the extraction process or to the column of the instrument. Standard recoveries are stated below:

Analyte	Beginning Standard	Ending Standard	Standard Addition to FT5069-08
Lithium	117%	117%	102.3%
Sodium	107%	107%	102.9%
Ammonium	116%	*132%	103.0%
Potassium	104%	104%	113.3%
Magnesium	*144%	*145%	114.7
Calcium	*123%	*133%	113.3
Sodium	111%	112%	101%

*Standard recovery exceeded method acceptance range of 80-120%.

CHAIN-OF-CUSTODY/
SAMPLE ANALYSIS REQUEST

Chain-of-Custody/ Sample Analysis Request

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Westinghouse Hanford Company

**4843 ALKALI METAL STORAGE FACILITY
INSPECTION FOR CARBONATES**

CHECKLIST FOR THE 4843 ALKALI METAL STORAGE FACILITY

The surfaces identified below have been verified free of lithium and sodium carbonates by visually inspection.

- A. 4843 AMSF Building Equipment (i.e., shielding concrete blocks and metal drum racks)
- B. 4843 AMSF Building Interior Walls
- C. 4843 AMSF Building Concrete Floor
- D. Inspection Standard:
 - 1) The above identified surfaces were inspected September 25, 1995 and are below action levels¹ as discussed in Chapter 7 of the 4843 Alkali Metal Storage Facility Closure Plan, Revision 1.

The inspections specified in Section D (above) has been satisfied for all surfaces (Sections A-C) visually inspected for carbonates. All surfaces are now deemed free of lithium and sodium carbonate contamination and are no longer considered a dangerous waste.

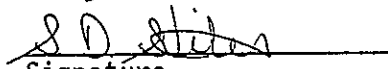
PC Miller, WHC FFTF Reg Compl Team Leader
Name/Title

 19/25/95
Signature Date

DH Chapin, DOE-RL/TPD Physical Scientist
Name/Title

 19/25/95
Signature Date

SD Stites, DOE-RL/TPD Physical Scientist
Name/Title

 19-25-95
Signature Date

Notes:

- 1. Action levels for lithium and sodium carbonate as defined by WAC 173-303-084, Washington State criteria characteristic category D (least toxic) dangerous waste is 10 percent weight per volume of the contaminated material.